

Federal Facilities Section

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Missouri Department of Natural Resources

U. S. Department of Energy's Weldon Spring Site

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Historical Overview

At the Weldon Spring Site Remedial Action Program a major cleanup is taking place. This site has been contaminated by years of production of materials to support and defend the United States during war times. Since 1993 the Missouri Department of Natural Resources has been on-site at the Department of Energy's Weldon Spring cleanup. The department's Federal Facilities Section was established to provide review and oversight on Superfund sites for the Department of Defense and Department of Energy. The section monitors groundwater, surface water and soils checking for contamination levels above the cleanup targets. These levels are established from the Record of Decision, which determines specific needs for each site. The following information and charts summarize our monitoring results at the Weldon Spring cleanup. Individual monitoring data is available to the community and interested citizens by contacting the Weldon Spring Project Field Office.



Extraction well being installed as part of a pilot study to remediate contamination in the groundwater.

Air Sampling

The Department of Natural Resources has not conducted independent air monitoring. However, we have reviewed the Department of Energy's data and monitoring process for air sampling.

Water Sampling

Sampling of the water at selected springs near the site, including Burgermeister Spring (Chart 1 and 2), has shown uranium and other contaminants such as nitrate continue to exceed the federal drinking water standards set out by the U.S. Environmental Protection Agency. These springs are not currently used as a public drinking water source.

Chart 1

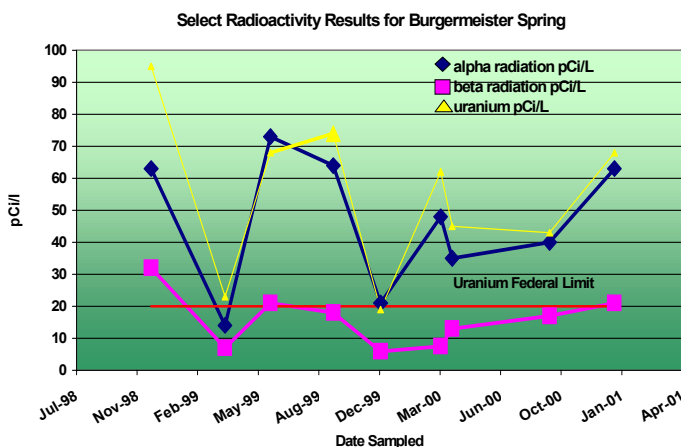
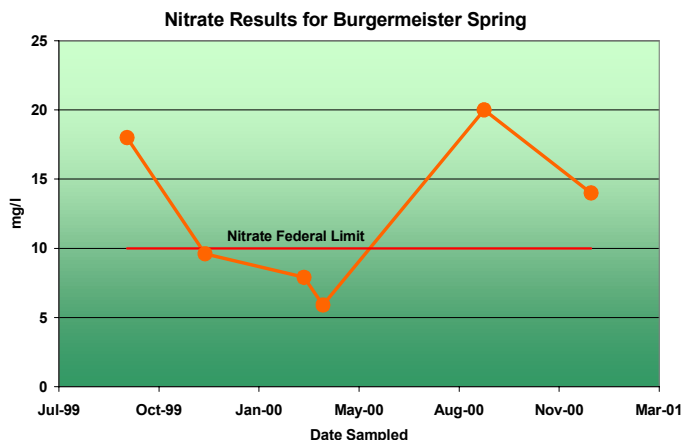


Chart 2



Groundwater Sampling Results

Sampling from groundwater monitoring wells placed in between the Weldon Spring site and the St. Charles County public drinking water supply wells (Chart 3 and 4) have shown that the uranium contamination in the groundwater is not above the federal drinking water standards. Further monitoring of the county's wells and treatment plant shows the water supply from this source is safe because it meets the drinking water standards.

Chart 3

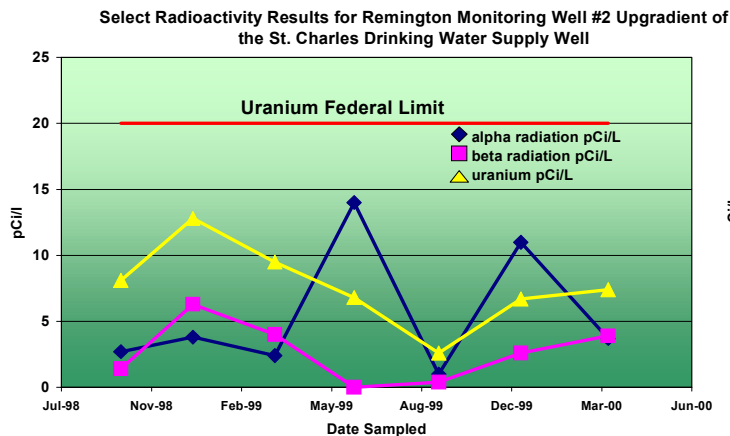
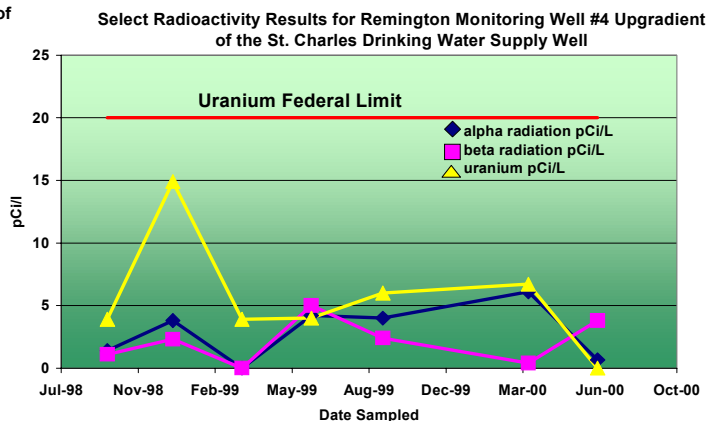


Chart 4



Alpha and beta radiation are indicators of radioactive contamination, analyzed along with uranium. The federal standard for alpha radiation is 15 picocuries per liter (pCi/l). The alpha radiation found at the St. Charles County water plant's treated water has consistently been less than 1 pCi/l or non-detectable. The federal standard for beta radiation is 50 pCi/l. The data for the plant's beta concentration ranges from 3.1 to 5.3 pCi/l. Both of these results fall below the federal standard.

Soil Sampling

The Department of Natural Resources has also collected random soil samples from the Chemical Plant and neighboring properties as the Department of Energy has cleaned up impacted areas. Laboratory analysis shows levels consistent with applicable cleanup criteria established by the site's decision documents. The department's Federal Facilities Section conducted additional independent sampling following a statistical sampling protocol used on areas contaminated by radioactive materials. The area sampled had been cleaned up and confirmed by the Department of Energy as having met cleanup criteria. The Department of Natural Resources' independent sampling found the Department of Energy's cleanup criteria were met in this area.



Soil sampling by Federal Facilities Section staff at the Weldon Spring site have found that the cleanup criteria have been met.

Conclusion

The Missouri Department of Natural Resources remains committed to monitoring the groundwater, surface water and soil around the Weldon Spring site to ensure that the cleanup, which is nearing completion, is successful. We believe that work that has been done to date by the Department of Energy has been conducted in a safe and expeditious manner. The Department of Natural Resources has worked closely with other local and state agencies as well as with local citizen groups in an effort to assure that cleanup of the area is protective of human health and the environment. Some contamination will remain, although at levels currently known to be safe based on present-day use. Appropriate institutional controls will be required to maintain a safe level of exposure. Long-term monitoring and stewardship of the site are important to maintaining that protectiveness.

For more information please visit the Missouri Department of Natural Resources website at www.dnr.state.mo.us or contact our Weldon Spring Project Field Office at (636) 441-8030.